

**Macomb Township
Macomb County, Michigan**

Storm Water Management

What is a Watershed, Anyway?

A watershed is another word for a river basin. It's an area of land that drains into a common body of water. Ever wonder where all that rain and melting snow goes when it washes down the drain in the parking lot? In most of Macomb County, the eastern half of Oakland County, and small areas of southern Lapeer and St. Clair counties, this water makes its way into the Clinton River and eventually out to Lake St. Clair. The land that drains into the Clinton River covers 760 square miles and includes over 1,000 miles of streams in addition to the 80-mile-long main branch.

In Michigan, communities are coming together to address storm water management on a watershed basis. In the Clinton River watershed, seven subwatershed planning groups have formed: Upper Clinton, Clinton Main, Stony/Paint, North Branch, Red Run, Clinton River East, and Lake St. Clair Direct Drainage.

Storm water pollution has become the predominant source of water quality and habitat impairments in the Clinton River and its tributaries. Under Phase II of the National Pollutant Discharge Elimination System (NPDES), part of the Clean Water Act, more than 40 local and county governments and numerous other public entities across the watershed must meet federal and state standards for reducing storm water pollution leaving their jurisdiction

Each group has charted a course to fulfill the requirements of their storm water permits by working together on a subwatershed basis, sharing data and information and creating joint planning documents.

The local governments in the Clinton River East Subwatershed (CREW) have been working with community leaders, residents, citizens groups, businesses and environmental organizations located within the subwatershed, to get input on issues that will shape future community policies and regulations. Many of the communities within this subwatershed are teaming up to address one of the biggest threats to water quality in South East Michigan - non-point source pollution. This area has identified some of the non-point source pollution sources to be nutrients from failing septic systems, pesticides and fertilizer runoff from lawns, oil and grease from our roads and parking lots, sediment from construction sites, to name just a few.

Communities, agencies and organizations in the CREW are working together on a subwatershed-based approach for furthering public awareness of the impacts and causes of non-point source pollution and to develop a strategy to empower residents and businesses to address these causes in their daily routines. Communities in the Clinton River East Subwatershed area recently held a stakeholder workshop and community forum to provide information on their subwatershed

planning efforts and to ask for your ideas and suggestions. Updates on these events and their outcomes will be posted here as soon as they are available.

Which Subwatershed Do You Live (or Work) In?

Find your location on the map below, then follow the link to visit your subwatershed page.

[Upper Clinton](#) [Stony/Paint Creek](#) [Clinton River East](#) [Lake St. Clair Direct Drainage](#)
[Clinton Main](#) [North Branch](#) [Red Run](#) [Anchor Bay Watershed](#)

The Southeast Michigan Partners for Clean Water formed to engage the public in activities that protect our water resources through continued awareness, knowledge, and action. The partnership includes representatives from SEMCOG, various counties, communities, watershed councils, and water-quality professionals in Southeast Michigan. [For more info click here...](#)

**Protecting Our Water . . .
It's as Easy as Seven Simple Steps**

Did you know that over three million people depend on our lakes and streams for their drinking water? And that in Southeast Michigan there are over 300,000 registered boaters and 3.5 million people visit a local park each year?

With this many people depending on our lakes and streams for drinking water and recreation, we need to be careful how we treat our water. You might not be able to see the stream or lake from your house, but it's there! It might be a small stream or ditch or even a storm drain in the street. All of these lead directly to our lakes and streams. So, what we do at home affects our water!

**More Resources On How You
Can Help Keep Our Waters Safe
Adopt-A-Stream Program**

- [February 21, 2005 Press Release](#)
[Clinton River Watershed Council](#)

[Where is Avondale School District located in the Clinton River Watershed?](#)

[CRWC Watershed Planning Update](#)

Don't Forget to Check Out Available Classes, Seminars & Conferences!

You & Your Watershed

Did you know you live in the Clinton River Watershed? Join the Clinton River Watershed Council staff and learn what a watershed is and how our everyday actions influence the health of the Clinton River Watershed.

We'll discuss past local water quality problems and explore current water quality challenges. We'll highlight current efforts to restore and protect the creeks, rivers, lakes, and adjacent lands within the Clinton River Watershed and we'll share seven simple steps that you can take to help protect water quality.

Click [here](#) for program dates/times

April 2004:

[SEMCOG launches water quality education program in Southeast Michigan](#)

Here are seven simple steps you can take in your home and yard to protect our lakes and streams.

1. **Help keep pollution out of storm drains.** Storm drains lead directly to our lakes and streams. So, never dump oil, pet waste, leaves, dirty water, or anything down a storm drain. Remember, only rain in the drain.
2. **Fertilize caringly and sparingly.** Excess fertilizer that gets into storm drains pollutes our lakes by causing large algae blooms and using up oxygen fish need to survive. Sweep excess fertilizer back onto your lawn, use a low or no phosphorus fertilizer, and have your soil tested to see what, if any, fertilizer is needed.
3. **Carefully store and dispose of household cleaners, chemicals and oil.** Instead of putting hazardous products like antifreeze, motor oil, and pesticides in the trash, down the storm drain, or on the ground, take them to a local hazardous waste collection day.
4. **Clean up after your pet.** Whether on a walk or in your yard, promptly clean up after your pet. Not only will be you a good neighbor, you will also protect our water from harmful bacteria.
5. **Practice good car care.** Consider taking your car to a car wash or washing your car on the grass.
6. **Choose earth friendly landscaping.** Protect your pets, kids, and the environment by using pesticides sparingly. Also, water your lawn only when it needs it and choose plants native to Michigan.
7. **Save water.** Over watering our lawns can easily carry pollution to the storm drains and to our lakes and streams. Consider using a broom instead of a hose to clean sidewalks and driveways. Direct hoses and sprinklers on the lawn, not the driveway. This will help save our lakes and streams and save you money.

For more easy steps on protecting our lakes and streams, visit www.semcog.org. Remember, our water is our future - and it's ours to protect!

Remember, you're not just fertilizing your lawn...

Storm drains found in our streets and yards empty into our lakes and streams. So, when we fertilize our lawn we could also be fertilizing our lakes and streams! While fertilizer is good for our lawn, it's bad for our water. Fertilizer that enters our lakes and streams can cause algae to grow and use up oxygen that fish need to survive. So what can you do to help?

- **Sweep it.** Sweep excess fertilizer and grass clippings from pavement back onto your lawn so that they don't wash into storm drains.
- **Buy low and go slow.** First, find out if you even need fertilizer! Contact your Michigan State University Extension office to get a soil test. If you do need it, choose a fertilizer with no or low phosphorus--phosphorus causes algae growth. You can also use an organic or slow-release nitrogen fertilizer, which causes less harm to water.
- **Hire smart.** Select a lawn care service that follows the practices noted above.

- **Mow high.** Keep your lawn at three inches in height. Taller grass strengthens roots and shades out weeds. Also, remember that the nutrients from grass clippings left on your lawn act as a great fertilizer.
- **Make fertilizer-free zones.** Keep fertilizer at least 20 feet away from the edge of any lakes, streams, or storm drains.

Remember, You're Not Just Maintaining Your Car

Did you know that just four quarts of oil can form an eight-acre oil slick if spilled or dumped down a storm drain? With over four million vehicles in Southeast Michigan, we all need to practice good car care to protect our lakes and streams.

How does caring for your car affect our waterways? Storm drains found in our streets and yards and roadside ditches lead directly to our lakes and streams. So, if motor oil and other fluids are dumped or washed into the storm drain, they pollute our local waterways.

What can you do?

- **Maintain it.** Keep your vehicle properly tuned and use the owner's manual to guide decisions about how often it is necessary to change fluids such as oil and antifreeze.
- **Take advantage of business expertise.** Consider taking your vehicle to the shop to have the oil and other fluids changed. These businesses have the ability to recycle the used materials and clean up accidental spills.
- **Recycle.** If you choose to change your oil and other fluids yourself, label the waste containers. Then, take them to your community's household hazardous waste collection day or to a business that accepts used oil. Never dump used oil, antifreeze, or other fluids on the ground or down the storm drain.
- **Soak it up.** Use kitty litter promptly to absorb small amounts of spilled vehicle fluids. Then sweep it into a bag and throw it in the trash. Don't leave these spills or wash them off pavement. They'll be flushed into the storm drains.
- **Do it under cover.** Whenever possible, perform vehicle maintenance in a well-ventilated, but covered location (e.g., garage). This minimizes the potential for rainfall to wash those inevitable spills and drips into our lakes and streams.

Remember, You're Not Just Washing Your Car

Did you know there are over four million vehicles in Southeast Michigan? With that many cars and trucks, we all need to practice good car care to protect our lakes and streams.

How does caring for your car affect our waterways? Storm drains found in our streets and roadside ditches lead directly to our lakes and streams. If dirty water from washing our cars gets into the storm drain, it pollutes our local waterways. This "dirty" water contains pollutants such as grease and dirt, and the soap itself contains phosphorus, which can lead to excessive algae growth in our lakes.

What can you do? Simple.

- **Make a date.** Car-wash facilities treat their dirty water before discharging it to our lakes and streams. So, make a date to take your car to a car wash.

- **Wash it—on the grass.** If you wash your car at home, consider washing it on the lawn. The lawn will gladly soak up the soapy, dirty water preventing it from entering storm drains or roadside ditches. If you can't use the lawn, try to direct the dirty water towards the lawn and away from the storm drain.
- **Minimize it.** Reduce the amount of soap you use or wash your car with plain water.

Remember, It ALL Drains to Our Lakes and Rivers

Help Keep Pollution Out of Storm Drains. Storm drains and roadside ditches lead to our lakes and streams. So, any oil, pet waste, leaves, or dirty water from washing your car or other outside activities that enters a storm drain gets into our lakes and streams.

How can you help? Follow these tips for simple ways you can help keep our water clean.

- **Sweep It.** Do you have extra fertilizer, grass clippings, or dirt on your driveway? Sweep it back onto your lawn. Hosing your driveway sends these pollutants into storm drains that lead to our lakes and rivers.
- **Keep It Clean.** Whether in the street or in your yard, remember to keep leaves, grass clippings, trash, and fertilizers away from storm drains.
- **Only Rain in the Drain.** Never dump motor oil, chemicals, pet waste, dirty or soapy water, or anything else down the storm drain. Once down the storm drain, all of these materials pollute our lakes and rivers!
- **Label It.** Volunteer to label storm drains in your neighborhood to inform residents that they flow directly to our lakes and streams. Encourage friends and neighbors to contact their local community for more information on storm drain stenciling programs.

Find out more at www.semco.org & www.crowc.org